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IMPACT OF INFORMATION TECHNOLOGY ON INDIAN BANKING SYSTEM

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ABSTRACT

Banking industry is backbone of Indian financial system and it is afflicted by many challenging forces. One such force is revolution of information technology. In this Globalized era, technology support is very important for the successful functioning of the banking sector. This research paper focuses on the impact of technology in Indian banking sector. Information technology refers to the acquisition, processing, storage and dissemination of all types of information using computer technology and telecommunication systems. The banking today is redefined and re-engineered with the use of IT and it is sure that the future of banking will offer more sophisticated services to customers with the continuous product and process innovations. Thus there is a paradigm shift from seller's market to buyer's market. So, the banks also change their approach from "Conventional Banking to Convenience Banking" and "Mass banking to Class Banking". The present paper focuses on the comprehensive research on impact of information technology on Indian Banking industry.

I.INTRODUCTION

Banking environment has become highly competitive today. To be able to survive and grow in the changing market environment banks are going for the latest technologies, which is being perceived as an 'enabling resource' that can help in developing learner and more flexible structure that can respond quickly to the dynamics of a fast changing market scenario. It is also viewed as an instrument of cost reduction and effective communication with people and institutions associated with the banking business. The significance of technology is greatly felt in the financial sector in view of the competitive advantage for banks resulting in the efficient customer service. In the development of Indian Economy, Banking sector plays a very important and crucial role. With the use of technology there had been an increase in penetration, productivity and efficiency. It has not only increased the cost effectiveness but also has helped in making small value transactions viable. It also enhances choices, creates new markets, and improves productivity and efficiency. Banking sector always stand at the forefront of the economy and innovation has paramount concern to the application of modern technical devices. Electronic delivery channels, ATMs, variety of cards, web based banking, and mobile banking are the names of few outcomes of the process of automation and computerization in Indian banking sector.

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OBJECTIVE OF THE STUDY

- 1. To analyze the role of IT in Indian banking industry.
- 2. To examine the extent of use of IT enabled services in Indian banking.
- 3. To assess various aspects of IT services provided by Indian banks.
- 4. To review the implementation of IT in Indian Banking industry

RESEARCH METHODOLOGY

The present study is based on the secondary data collected from different journals, magazines, sites and published data from various issues of RBI and different Public sector banks. Various studies on this subject have also been referred in this study

SAMPLE DESIGN FOR DIAGONOSTIC STUDY

The universe of the present study is the Scheduled commercial banks of India. The Indian Banking sector has been divided into three groups and a representative sample of 30% has been selected from each group

i) Nationalized bank Group:

- a. Punjab National Bank (PNB)
- b. Canara Bank (CB)
- c. Bank of India (BOI)
- d. Bank of Baroda (BOB)
- e. Indian Overseas Bank (IOB)
- f. Oriental Bank of Commerce (OBC).

ii) SBI & its Associates bank Group:

a.State Bank of India (SBI)

iii) New private sector bank Group:

- a. ICICI Bank ltd (ICICI)
- b. HDFC Bank Ltd (HDFC)

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II.RECENT IT TRENDS OF INDIAN BANKS

The banking industry is going through a period of rapid change to meet competition, challenges of technology and the demand of end user. Clearly technology is a key differentiator in the performance of banks. Banks need to look at innovation not just for product but for process also. Today, technology is not only changing the environment but also the relationship with customers. Technology has not broken many barriers but has also brought about superior products and channels. This has brought customer relationship into greater focus. It is also viewed as an instrument of cost reduction and effective communication with people and institutions associated with the banking business. The RBI has assigned priority to the up gradation of technological infrastructure in financial system. Technology has opened new product and services, new market and efficient delivery channels for banking industry. IT also provides the framework for banking industry to meet challenges in the present competitive environment. IT enables to cut the cost of global fund transfer. Some of the recent IT devices described as below-

<u>Electronic Payment and Settlement System</u>- The most common media of receipts and payment through banks are negotiable instruments like cheques. These instruments could be used in place of cash. The inter bank cheques could be realized through clearing house systems. Initially there was a manual system of clearing but the growing volume of banking transaction emerged into the necessity of automating the clearing process.

<u>Use Of MICR Technology</u>- Among the most important improvement in paper based clearing system was the introduction of MICR (Magnetic Ink Character Recognition) in the mid 1980s. MICR overcomes the limitation of clearing the cheques within banking hours and thus enables the customer to get the credit quickly. These are machine-readable codes added at the bottom of every cheque leaf which helped in bank and branch-wise sorting of cheques for smooth delivery to the respective banks on whom they are drawn. This no doubt helped in speeding up the clearing process, but physical delivery of cheques continued even under this partial automaton.

CTS (Cheque Truncation System)- The CTS was launched on pilot basis in new Delhi in 2008 with the participation of 10 Banks. Truncation means stopping the flow of the physical cheques issued by a drawer to the drawee branch. The physical instrument is truncated at some point en route to the drawee branch and an electronic image of the cheque is sent to the drawee branch along with the relevant information like the MICR fields, date of presentation, presenting banks etc.

Electronic Clearing Services (ECS) – The ECS introduced by RBI in 1995 which is similar to automated clearing houses that are operational in other countries like US. The ECS was the first version of "Electronic Payments" in India. It is a mode of electronic funds transfer from one bank account to another bank account using the mechanism of clearing house. It is very useful in case of bulk transfers from one account to many accounts or vice- versa. ECS facility available at more than 74 Centers in India. The beneficiary has to maintain an account with the one of bank at ECS centre.

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Electronic Fund Transfer (EFT) - The EFT System was implemented in 1995 covering 15 centers where the Reserve Bank managed the clearing houses. Special EFT (SEFT) scheme, a variant of the EFT system, was introduced with effect from April 1, 2003, in order to increase the coverage of the scheme and to provide for quicker funds transfers. SEFT was made available across branches of banks that were computerized and connected via a network enabling transfer of electronic messages to the receiving branch in a straight through manner (STP processing). In the case of EFT, all branches of banks in the 15 locations were part of the scheme, whether they are networked or not.

Real Time Gross Settlement (RTGS) - RTGS was launched by RBI in 2004 which enabled a real time settlement on a gross basis. RTGS system is a funds transfer mechanism where transfer of money takes place from one bank to another on a "real time" and on "gross basis". This is the fastest possible money transfer system through the banking channel. Settlement in "real time" means payment transaction is not subjected to any waiting period. The transactions are settled as soon as they are processed. "Gross settlement" means the transaction is settled on one to one basis without bunching with any other transaction.

<u>Core banking Solutions (CBS)</u> - Computerization of bank branches had started with installation of simple computers to automate the functioning of branches, especially at high traffic branches. Core Banking Solutions (CBS) is the networking of the branches of a bank, so as to enable the customers to operate their accounts from any bank branch, regardless of which branch he opened the account with. The networking of branches under CBS enables centralized data management and aids in the implementation of internet and mobile banking. Besides, CBS helps in bringing the complete operations of banks under a single technological platform.

<u>Automated Teller Machine (ATM)</u> - ATMs were introduced to the Indian banking industry in the early 1990s initiated by foreign banks. It is perhaps most revolutionary aspect of virtual banking. The facility to use ATM is provided through plastic cards with magnetic strip containing information about the customer as well as the bank. In today's world ATMs are the most useful tool to ensure the concept of "Any Time Banking" and "Any Where Banking".

<u>Phone Banking</u>- Customers can now dial up the banks designed telephone number and he by dialing his ID number will be able to get connectivity to bank"s designated computer. By using Automatic voice recorder (AVR) for simple queries and transactions and manned phone terminals for complicated queries and transactions, the customer can actually do entire non-cash relating banking on telephone: Anywhere, Anytime Banking.

<u>Internet Banking</u>-Internet banking enables a customer to do banking transactions through the bank's website on the Internet. It is a system of accessing accounts and general information on bank products and services through a computer while sitting in its office or home. This is also called virtual banking.

<u>Mobile Banking-Mobile banking facility</u> is an extension of internet banking. Mobile banking services are provided to the customers having the credit card accounts with bank. In mobile banking, the services are

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provided by the association of banks and cellular service providers through SMS or WAP enabled mobile instruments.

<u>Customer Relationship Management (CRM)</u> - (CRM) refers to the methodologies and tools that help businesses manage customer relationships in an organized way-finding, getting and retaining customers. CRM processes that help to provide employees with the information they need to know their customers' wants and needs and build relationships between the company and its customers.

III.CHALLENGES FACED BY INDIAN BANKING SCENARIO

It has not been a smooth sailing for banks keen to jump onto the IT bandwagon. There have been impediments in the path like the obduracy once shown by trade unions who felt that IT could turn out to be a threat to secure employment,

Further. The banks face difficulties to expand its branch networks in remote areas due to lack of facilities. Another challenges the banks have had to face corners the inability of banks to retain the trained and talented personnel, especially those with a good knowledge.

Increasing used of IT in banks has also brought up security concerns. The passing of IT Act has come as a boon to the banking sector and banks should now ensure to abide strictly by its covenants. An effort should be also made to cover e-business in the country "s consumers laws.

The choice of right channel, justification of IT investment on ROI, E-Governance disclosures, customers relationship management, penetration of IT in rural areas, outsourcing of IT operations are the major challenges and issues in the use of IT in banking operations.

IV.FUTURE OUTLOOK IN INDIA

The Indian banks lag far behind the international banks in providing online banking. In fact, this is not possible without creating sufficient infrastructure or presence of sufficient number of users. The experience of ICICI Bank Ltd. and HDFC Bank Ltd. Shows that the number of transactions carried out on the NET are very limited. Technology is going to hold the key to future of banking. Banking achievements are not possible without IT revolution. So banks should try to find out the trigger of change. The approach of the IT concept to the rural area may also be adopted. More and more regional languages software could be introduced to attract more and more people from rural area also. The surplus manpower generated by the use of IT should be used for marketing new schemes of the banks.

V.CONCLUSION

Information Technology enables sophisticated product development, better market infrastructure, implementation of reliable techniques for control of risks and helps the financial intermediaries to reach geographically distant and diversified markets. Internet has significantly influenced delivery channels of the

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banks. Internet has emerged as an important medium for delivery of banking products and services. Information, communication and networking, achieving inter branch connectivity, moving towards Real Time gross settlement (RTGS) environment the forecasting of liquidity by building real time databases, The shift from traditional banking to e-banking is changing customer's expectations. With the globalization trends world over it is difficult for any nation big or small, developed or developing, to remain isolated from what is happening around. For a country like India, which is one of the most promising emerging markets, such isolation is nearly impossible. More particularly in the area of Information technology, where India has definitely an edge over its competitors, remaining away or uniformity of the world trends is untenable. Financial sector in general and banking industry in particular is the largest spender and beneficiary from information technology. This endeavours to relate the international trends in it with the Indian banking industry.

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